Pelargonium Sidoides
Natural Colds & Flu Buster

Pelargonium
Organic Certified

Pelargonium Sidoides

Organic
Certified

AFRIGETICS
BOTANICALS

FSSC 22000

PELA POWER™ EXTRACT
OUR VISION
Our vision is to identify and develop new medicines from the vast botanical resources in Southern Africa.

OUR VALUES
We honour the inherent value of African medicinal herbs. We respect nature and strive to employ the best practices in sustainable wild harvesting. We strive to uplift the communities we work with by developing profit sharing and skills development partnerships with indigenous people.

OUR MISSION
Afrigetics wish to introduce to world to the immense healing power of African botanical resources. We are committed to developing commercially viable ingredients and developing strong supply chains to deliver our product to the international wellness market.
MESSAGE FROM OUR CEO

Pelargonium is proven to reduce the duration and severity of the common cold.

In this brochure I want to introduce you to our flagship product, Pelargonium sidoides, a plant that has significant commercial and healing potential in the world of natural cold and flu phytomedicines.

As the CEO of Afrigetics I look forward to developing partnerships that ensure our mutual success through doing business in a way that is ethical, innovative and dynamically responsive to the continually changing needs of our global natural products marketplace. Our goal is to be the trusted experts in the supply of Pelargonium to the global marketplace and to offer you a reliable and accredited supply chain with our range of innovative products.

Steven Hurt
Owner & Director
Afrigetics Botanicals

Why should you be interested in Pelargonium sidoides?

#1
Clinically Proven
Over 20 clinical trials and many other studies have been done on Pelargonium sidoides and the results are outstanding.

#2
Commercial Success Stories
The commercial success records of Kaloba™ and Umcka ColdCare™ with reported sales of over EUR80 m in 2006 alone.

#3
Market Growth
Sales for the cough, cold, flu, and allergy remedy market are constantly on the rise, especially in the natural products category.
Afrigetics is rooted in African ethnopharmacology. We are experts in traditional medicinal knowledge and our team maintain strong ties with local plant users. We are leaders in sustainable harvesting and diligent partners with rural harvesters. Afrigetics is committed to combining twentieth century innovation with ancient African indigenous knowledge. Our products are backed-by-science, Afrigetics has research partnerships with a number of South African universities. We have a proven track record as reliable exporters and are pioneering novel processing techniques to bring our clients tailor-made raw materials and extracts.

Afrigetics is driven by superior quality, we believe our standards of food safety set us apart. Afrigetics has invested in a state of the art quality assurance system with FSSC 22000 accreditation. This Food Safety System Certification demonstrates our company’s robust and effective management system. Our reliable team are well positioned to meet the requirements of regulators, food business clients and consumers. In addition, Afrigetics are licenced distributors of indigenous flora and FDA registered. Afrigetics are passionate about discovering,

**THE AFRIGETICS STORY**

Afrigetics is a leading exporter of Southern African medicinal herbs. Our award-winning team prides itself on providing superior African healing plants to the international market. Protecting and developing African botanical wisdom. We are poised to unlock the tremendous potential of African medicinal herbs and bring these resources to a global platform. We wish to share the success of the African pharmacopeia with the world and we believe the star of our medicine chest is undoubtedly the African pelargonium. Afrigetics seeks to empower our clients to reap the benefits of these valued botanicals in their products, thus enabling others to share in the healing power of nature.

“We believe that the botanical resources of Africa may hold the key to the treatment of major medical and health ailments and, we want to be at the forefront of these discoveries…”
PRECIOUS PELARGONIUM

Africa's natural relief for colds, flu and respiratory tract infections.
Pelargonium sidoides is a small and humble shrub that grows abundantly in the sun warmed, stony soil of the South African Eastern Cape and Lesotho grasslands. Known locally by its common name, African geranium, it can be found nestled beneath tall grasses and aromatic floral neighbours on coastal slopes. The small indigenous herb has soft, velvety textured grey-green leaves and dark magenta coloured flowers. This insignificant looking plant however contains a treasure trove of medicinal compounds and has been part of local healing practices for millennia. Pelargonium is an example of nature's immune boosting and pathogen fighting power. It is celebrated as Afrigetics Botanicals’ flagship commercial herb.
The drug is listed in the European and African Pharmacopoeia and has European approval as a herbal medicine and food supplement.

The original hunter gatherer inhabitants of Southern Africa, the Koi-San, knew of this herb and used it for the treatment of diarrhoea and dysentery. Knowledge of the small bush later fell into the hands of the Cape Dutch colonists, who christened it Roorabas, perhaps for its red tinted tuberous roots. Herdsmen dubbed the plant “Kalverbossie”, meaning ‘calf bush’ and used the woody twisted underground rhizomes to treat stomach complaints in their animals. It served in Cape herbal medicine as a tonic for weakness, fatigue and in the treatment of gonorrhoea.

The ethnobotanical potential of African Geranium was brought to Europe in the early 1900’s after a young explorer called Charles Henry Stevens was treated in South Africa for his pulmonary tuberculosis by a local healer. A bitter tea made of the roots of the plant drove his illness into remission. He then used the Umckaloabo herb to develop “Stevens’ Consumption Cure” and marketed it in England. It wasn’t until the 1970’s, well after Steven’s death that the plant ingredient of his remedy was identified as Pelargonium.

In the 1990’s, a German drug manufacturer, Schwabe Pharmaceuticals, developed a highly popular herbal cough syrup called “Umckaloabo” containing liquid extract Eps7630. In 2006, this company sold more than EUR80 million of this pelargonium based product. The drug is listed in the European and African Pharmacopoeia and has European approval as a herbal medicine and food supplement. Schwabe’s withdrawal of the patents for this medicine in 2010 has allowed other pharmaceutical companies to follow suit and explore the potential of this natural remedy.

AFRICAN ETHNOBOTANICAL ORIGINS

In the 1990’s, a German drug manufacturer, Schwabe Pharmaceuticals, developed a highly popular herbal cough syrup called “Umckaloabo” containing liquid extract Eps7630. In 2006, this company sold more than EUR80 million of this pelargonium based product. The drug is listed in the European and African Pharmacopoeia and has European approval as a herbal medicine and food supplement. Schwabe’s withdrawal of the patents for this medicine in 2010 has allowed other pharmaceutical companies to follow suit and explore the potential of this natural remedy.
Currently *P. sidoides* is listed on the Red Data List of South Africa's species as of 'least concern'; they state that less than 5% of the local population is being impacted by harvesting (Red Data List, 2017). Even so, strict controls by the South African Department of Environmental Affairs require collectors to obtain a bioprospecting licence. Within the constraints of the Biodiversity Act, our primary processors identifies areas of wild cultivation and trains harvesters in rural areas to identify and collect the Pelargonium. Care is taken to prevent overharvesting of the underground tuberous roots and so to provide a supply for posterity, protect the herb from extinction and to provide an ongoing livelihood for local collectors.

Many of the collectors subcontracted by our primary processors are elderly members in their communities with rich traditional knowledge of indigenous plants. Harvesters actively propagate the plant material as it is collected, by breaking off aerial shoots and replanting the cuttings. They leave the deeper, more mature roots in the soil, to allow for rapid regrowth after harvesting. In addition to supplementing their income, and under the stipulations of the Biodiversity Act, local collectors and land owners profit from a benefit sharing agreement where a rand value of their harvest is paid into a government controlled ‘Bioprospecting Trust Fund’ for distribution within the community.

Afrigetics Botanicals recognises that despite its best efforts, currently well managed wild stocks may be subject to depletion in the future and are actively working with the University of Stellenbosch towards refining a cultivation system for *P. sidoides*. Plant breeding practices will be used to identify cultivars with the highest levels of active ingredients and grow these on specialized farms in the Eden District using ecological cultivation methods.

With this aim in mind, our primary processing partners have entered into a benefit sharing agreement with the indigenous communities of Southern Africa who harvest our herbs through a network of 350 families. Furthermore, as licensed collaborators of a bio-prospectors permit, we are poised to continue unlocking the potential of Africa’s Green Gold, for many years to come.
Traditional herbal medicinal product for the symptomatic treatment of the common cold

Pelargonium acts by preventing bacteria from sticking to the cells lining the respiratory system and by stimulating white blood cells to attack and destroy these invading bacteria. The chemicals contained in this medicine also help to support the immune system by producing specific proteins, called defensins, to protect cells from invasion. The antiviral properties of *P. sidoides* lies in its ability to stimulate the body’s cells to produce interferon, a chemical that ‘interferes’ with virus replication. Its antibacterial effect is attributed to chemicals in the extract causing the tiny hair-like projections which line our respiratory tract, called cilia, to beat faster and to expel mucus. In addition, chemicals found in the plant have a mucolytic effect, helping to dissolve thick mucus in the airways.

There is no cure for the common cold, since it is spread by a virus, but Pelargonium has been proven to aid healing. This herbal medicine has been shown to be safe and effective and may form an important alternative to antibiotics.

Many pharmaceutical companies use ethanol to extract the active ingredients from the pelargonium root. These extracts have proven effective for the treatment of respiratory tract infections including bronchitis, tonsillitis, sinusitis and the common cold. Clinical trials have shown the medicine to reduce both the duration and severity of these illnesses. One such preparation, Eps7630, prepared by Schwabe Pharmaceuticals has been the subject of over 20 clinical studies, involving 9000 people.

Pelargonium’s success as a cold and flu buster is unsurprising as over half of general practitioner’s visits involve patients complaining of upper respiratory tract infections. Adults can suffer from as many as four colds annually and young children get up to 12 times per year. It is considered to be the single largest cause of work and school related absenteeism. Antibiotics are generally considered to be ineffective for most cases of colds and flu, yet treatment is clearly needed.

The dried rhizomes of *P. sidoides* contain a host of chemical compounds. Among these are polyphenols including gallic acids. Polyphenols are a group of plant chemicals which give foods a bitter taste, represent potent plant defence chemicals and often act as powerful antioxidants. Root extracts are rich in coumarins, including a unique phytochemical called ‘umckalin’. In addition, the remedy contains powerful flavonoids including quercetin, catechin and gallocatechin. These plant nutrients are responsible for vivid colour in fruit and vegetables and have anti-inflammatory and immune boosting properties.
Three-Way Effect

Pelargonium has been shown to have a three-way effect.

Antibacterial

- The Pelargonium sidoides extract prevents bacteria from attaching to cells in mucous membranes.¹
- Pelargonium sidoides extracts inhibit the adherence of bacteria such as Streptococcus pyogenes and Helicobacter pylori to epithelial cells in vitro.
- Furthermore, ciliated cells isolated from the nasal epithelium enhanced their ciliary beat frequency in the presence of these extracts, which should allow a better removal of excess mucous and bacteria.

Antiviral

- Similarly, Pelargonium sidoides prevents viruses from attaching to the mucous membrane cells and stimulates the body’s immune system in such a way that both bacteria and viruses are prevented from multiplying.³
- In vitro, the extracts show efficacy against cellular infections with influenza virus, HSV, EMCV, RSV, coronavirus, parainfluenza virus, and coxsackie virus, and this appears to be mainly mediated indirectly by inhibition of virus attachment and spreading.

Expectorant

- The extract acts as an expectorant, allowing the body to expel contaminated mucous, making conditions less suitable for the multiplication of the bacteria and viruses – can only find animal data.
- The three-way effect attacks the acute infection at its root, the stabilisation of the immune system prevents a re-infection and the vicious circle of infection, a short recovery phase and new infection is broken.

The efficacy of the Pelargonium sidoides extract against a number of bacterial and viral infections has been well researched. This extract has been the subject of over 20 clinical studies involving more than 9,000 patients, including children as young as one year (Brown, 2009). It has been shown to safely and effectively treat acute upper respiratory tract infections such as bronchitis, tonsillitis, and the common cold. The following is a summary of some of the clinical data available:

### Tonsillitis

Professor V.V. Bereznoy MD, treated over 140 children with bacterial tonsillitis in a placebo-controlled trial in Kiev in 2003. His treated approximately half the children with Eps 7630 (manufactured by Schwabe Pharmaceuticals) and the remainder with a placebo. The children took 3ml of the extract per day for 6 days. Researchers in this study monitored pain, difficulty swallowing, salivation, redness, fever, and headache, using a ‘tonsillitis severity score’. Bereznoy’s study confirmed the superiority of Pelargonium sidoides extract compared to the placebo. The study demonstrated the ability of Pelargonium sidoides extract to reduce the severity of all five symptoms, shortened the duration of the illness and protected patients from complications. Rapid recovery was observed in three quarters of the patients treated with Pelargonium sidoides extract and a third of those treated with the placebo.

Bereznoy (2003) points out that more than half of the Pelargonium sidoides extract group were able to get out of bed after two days of treatment. In the placebo group, however, more than half the patients were still in bed on day 4 or had abandoned the study because of a lack of efficacy. This reduction in bed rest of 48 hours under Pelargonium sidoides extract, compared with the placebo, shows the benefit of this treatment. Indeed, it is more than double the reported benefit of antibiotic treatment at 16 hours (Del Mar, 2001). Six days after beginning treatment, 80% of the Pelargonium sidoides extract group were back at school, whereas only 20% of the placebo group were able to resume school (Bereznoy et al, 2003).

### Bronchitis

Matthys et al., (2003) studied the efficacy of Pelargonium sidoides extract in adults with acute bronchitis. The group of researchers conducted a randomized, double-blind, placebo-controlled trial on over 450 patients. This study found that Pelargonium sidoides extract was superior in efficacy compared to placebo in the treatment of adults with acute bronchitis. Treatment with Pelargonium sidoides extract clearly reduced the severity of symptoms, duration of illness and shortened the time taken off work by nearly 2 days (Matthys et al, 2003).

Further observational studies by Haidvogl and Heger (2007) examined the effect of Pelargonium sidoides extract.
extract on over 740 children with acute bronchitis. The researchers monitored treatment with the herbal extract for up to 14 days. Five 'bronchitis specific symptoms' were summed up to give an overall measure of disease severity. Haidvogl and Heger concluded that Pelargonium sidoides extract is a safe and effective treatment for acute bronchitis. In addition, they note that in 88.3% of cases, the responsible physician rated the treatment as successful. Adverse events were minor and transitory

Sinusitis
A randomized, double-blind, placebo-controlled study of 103 adult patients with acute sinusitis was conducted by Bachert et al at 11 clinics, in Kiev, in 2009. The patients were studied for 21 days and assessed on 6 symptoms of sinusitis including headache, nasal obstruction and discharge. Bachert et al (2009) report that by day 7, 63% of the Pelargonium sidoides extract group were back to work compared with 37% in the placebo group. By day 21, sinus x-rays were normal in more than 90% of the Pelargonium sidoides extract group compared with 10% for the placebo group. The researchers highlighted “improvements shown in the patients' health-related quality of life, activity level and general well-being”, they further observed a quicker return to work. Bachert et al (2009) conclude that “Pelargonium sidoides extract should be considered as a possible first line treatment even in patients suffering from an acute rhinosinusitis of presumably bacterial origin”.

Common Cold
Lizogub, Riley and Herger (2009) examined the efficacy of Pelargonium sidoides extract on patients with the common cold, one of the most prevalent illness in the world. The study compared Pelargonium sidoides extract to a placebo over 10 days. Over 100 patients were tracked according to their cold symptoms including; nasal discharge, sore throat, nasal congestion, sneezing, hoarseness, cough, headache, muscle aches, and fever. Lizogub, Riley and Herger (2009) report that Pelargonium sidoides extract represents an effective treatment of the common cold. After 10 days, 78.8% of the Pelargonium sidoides extract group was clinically cured compared with 31.4% in the placebo group. The Pelargonium sidoides extract group returned to work on average of 2 days earlier than the placebo group.

In conclusion, clinical trials have shown that P. sidoides extract is an effective treatment for a number of upper respiratory tract infections. Kolodziej (2011) points to the reasons for its therapeutic effects; antibacterial activity, antiviral activity, immune stimulation and an increase in ciliary beat frequency.

BIBLIOGRAPHY


Acute, self-limited viral infection causing upper respiratory symptoms (i.e., cough, sore throat, etc.).

**Sudden, forceful expulsion of air from the lungs to clear material from the airways and to protect the lungs from particles that have been inhaled.**

**Coughs**

Type I reactions underlie atopic disorders developing < 1 h after exposure to antigens.

**Allergic Asthma**

Inflammation of the sinuses, most commonly caused by a viral or bacterial infection or by an allergy.

**Sinusitis**

Inflammation of the tracheobronchial tree, commonly following an URI; the cause is almost always a viral infection.

**Rhinitis**

Inflammation of the nasal mucous membrane.

**Pharyngitis**

Sore throat is pain in the posterior pharynx that occurs with or without swallowing.

**Laryngitis**

Inflammation of the voice box (larynx).

**Pneumonia**

Acute inflammation of the lungs caused by infection.

**Treatable Conditions**

- **Colds**
  - Acute, self-limited viral infection causing upper respiratory symptoms (i.e., cough, sore throat, etc.).

- **Antibacterial**
- **Antiviral**
- **Expectorant**
Product Composition | Umckalin Content | Uses
--- | --- | ---
**POWDER EXTRACT** | A dry powder extract standardized for umckalin content | NLT 160ppm  NLT 800ppm  NLT 1100ppm | Used as an ingredient in formulations for liquid drops, cough syrups or sprays and can also be pressed into tablets or encapsulated

**PIECES** | Shredded whole pelargonium root | NLT 100ppm | For further processing

**MILLED POWDER** | Dark brown to reddish granular powder milled from dried pelargonium root | NLT 100ppm | For further processing

**TINCTURE ETHANOL** | Dark brown to reddish opaque liquid with ethanolic smell, containing 16-19% ethanol | NLT 15ppm | Single ingredient for the formulation of herbal medicine

**TINCTURE GLYCEROL** | Dark brown to reddish opaque liquid with syrupy viscosity | NLT 15ppm | For the formulation of cough syrups or liquid herbal medicines

**COUGH SYRUP** | Dark brown to reddish opaque-liquid with syrupy viscosity and mint flavor | NLT 15ppm | Ready to use sugar-free cough syrup with mint (can be standardised for umckalin)
Pelargonium sidoides Powder Extract

**PRODUCT DESCRIPTION**
Pelargonium sidoides powder extract.

**FEATURES**
A dry powder extract of Pelargonium sidoides made according to EMA monograph.

This powder can be used as an ingredient in formulations for liquid drops, cough syrups or sprays and can also be pressed into tablets or encapsulated.

**ACTIVE INGREDIENT**
NLT 1100ppm umckalin

**PACKAGING DESCRIPTION**
Foil gusset bag, ziplock closure

**PACK SIZE**
1kg and 5kg bags

PelaPower™ is our standardized dry powder extract of Pelargonium sidoides (Umckaloabo) which is made according to the method stated in the EMA monograph. This type of extract which is equivalent to EPS7630 has a long history of efficacy in the treatment of colds and flu, especially for bronchial related ailments. PelaPower™ is standardised for umckalin and is suitable for further processing into liquid extracts or for capsules and tablets.
Afrigetics specializes in the supply of wild-harvested Pelargonium sidoides and offers a range product from raw materials to extracts and finished products. Our products are handled within an FSSC22000 environment and adhere to the requirements of the international marketplace.

**Pelargonium sidoides Whole, Dried Pieces**

**PRODUCT DESCRIPTION**
Dark brown to reddish pieces of shredded whole Pelargonium root, cut and sifted according to customer specification.

**ACTIVE INGREDIENT**
Not less than 100ppm umckalin

**STERILIZATION**
Steam sterilization (Optional)

**PACKAGING DESCRIPTION**
- Inner Packaging: 2 PVC plastic liner (food grade)
- Outer Packaging: White polypropylene agricultural weaved bag

**PACK SIZE**
15kg raw material

**Pelargonium sidoides Milled Powder**

**PRODUCT DESCRIPTION**
Dark brown to reddish powder made from dried whole Pelargonium root with a particle size <10% retained on a 425 micron sieve

**ACTIVE INGREDIENT**
Not less than 100ppm umckalin

**STERILIZATION**
Steam sterilization (*optional)

**PACKAGING DESCRIPTION**
- Inner Packaging: 2 PVC plastic liner (food grade)
- Outer Packaging: White polypropylene agricultural weaved bag

**PACK SIZE**
20kg raw material
Afrigetics offers liquid extracts of Pelargonium sidoides as partially processed products that can be used for further processing. All extracts are manufactured for us by certified facilities, audited under our FSSC 22000 program.

**Pelargonium sidoides**

**Liquid Extracts**

**Ethanolic Liquid Extract 1:8-10**

**Product Description**
Pelargonium sidoides ethanolic extract 1:8-10 (alcohol 16-19%)

**Features**
An ethanolic extract made according to the pharmacopoeia monograph on Pelargonium sidoides. This tincture can be used as an ingredient in formulations for liquid drops, cough syrups or sprays or as a ready-to-use product.

**Active Ingredient**
15ppm umckalin

**Packaging Description**
PVC bucket with tamper-proof closure.

**Pack Size**
5l or 25l

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**Glycerine Extract**

**Product Description**
Pelargonium sidoides vegetable glycerine tincture

**Features**
A non-alcoholic, sugar-free extract of Pelargonium sidoides. This tincture can be used as an ingredient in formulations for liquid drops, cough syrups or sprays or as a ready-to-use product.

**Active Ingredient**
NLT 15ppm umckalin

**Packaging Description**
PVC bucket with tamper-proof closure.

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**Cough Syrup Formulation with Mint**

**Product Description**
Alcohol-free and sugar-free Pelargonium sidoides vegetable glycerine tincture formulated with mint oil.

**Features**
A non-alcoholic, sugar-free glycerine extract of Pelargonium sidoides that is ready to use.

**Active Ingredient**
Umckalin

**Packaging Description**
PVC bucket with tamper-proof closure.

**Pack Size**
5l or 25l

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In striving to continually improve our services we have now gone the extra mile to ensure that our palletization is truly world class. Our company offers packaging solutions that will withstand the toughest journeys by road, air or sea. Better packaging of your goods means fewer troubles further down the line by reducing the exposure to moisture (especially on sea cargo), damage by poor third party handling and general accidents that can occur during transit. Speak to us about your packaging requirements and we will listen to your every need.
Afrigetics Botanicals is export ready. Since June 2008 we have successfully delivered over 1000 consignments by air, sea and courier to North America (USA, Canada), South America (Brazil, Argentina), West Europe (Germany, France, Italy, UK), Eastern Europe (Ukraine, Russia), Asia (China, Korea) and the Middle East.

Our logistics training is compliant with INCOTERMS 2010 and we have substantial experience in all aspects pertaining to the export process - which is faithfully carried out by VDM Cargo Solutions.

- International Sea and Air Freight Forwarding
- Customs Clearing
- Warehousing (Bonded and Duty Paid)
- Cartage (Deliveries)
- Marine and Airfreight Insurance
Franco van der Merwe, owner of VDM Cargo Solutions started his career at Customs in 1991 as auditor in the Excise department followed by a stint as a Customs import inspector before entering the private sector.

Over the past 27 years he has gained valuable experience in all aspects of imports and exports, from framing entries to heading up operations for a major clearing and forwarding house in South Africa.

His passion for the industry and his clients ultimately led him to start VDM Cargo Solutions.
This is a summary of the scientific conclusions reached by the Committee on Herbal Medicinal Products (HMPC) on the medicinal uses of pelargonium root. The HMPC conclusions are taken into account by EU Member States when evaluating applications for the licensing of herbal medicines containing pelargonium root.

INFORMATION RESOURCES

This summary is not intended to provide practical advice on how to use medicines containing pelargonium root. For practical information about using pelargonium root medicines, patients should read the package leaflet that comes with the medicine or contact their doctor or pharmacist.
The HMPC concluded that, on the basis of their long-standing use, these pelargonium root preparations can be used to treat the symptoms of the common cold. Pelargonium root medicines should only be used in patients from the age of 6 years. If symptoms last longer than 1 week or worsen while taking the medicine, a doctor or qualified healthcare practitioner should be consulted. Detailed instructions on how to take pelargonium root medicines and who can use them can be found in the package leaflet that comes with the medicine.

WHAT IS PELARGONIUM ROOT?

Pelargonium root is the common name for the root of the plants Pelargonium sidoides DC and Pelargonium re-niforme Curt. The HMPC conclusions only cover pelargonium root preparations that are obtained by putting the plant material in a solvent (such as ethanol) to dissolve compounds and form a liquid extract. The solvent may then be evaporated to obtain a dry extract. Herbal medicines containing these pelargonium root preparations are usually available in liquid or solid forms to be taken by mouth. Pelargonium root preparations may also be found in combination with other herbal substances in some herbal medicines. These combinations are not covered in this summary.

WHAT ARE THE HMPC CONCLUSIONS ON ITS MEDICINAL USES?

The HMPC concluded that, on the basis of their long-standing use, these pelargonium root preparations can be used to treat the symptoms of the common cold. Pelargonium root medicines should only be used in patients from the age of 6 years. If symptoms last longer than 1 week or worsen while taking the medicine, a doctor or qualified healthcare practitioner should be consulted. Detailed instructions on how to take pelargonium root medicines and who can use them can be found in the package leaflet that comes with the medicine.

WHAT EVIDENCE SUPPORTS THE USE OF PELARGONIUM ROOT MEDICINES?

The HMPC conclusions on the use of these pelargonium root medicines for treating common colds are based on their ‘traditional use’. This means that, although there is insufficient evidence from clinical trials, the effectiveness of these herbal medicines is plausible and there is evidence that they have been used safely in this way for at least 30 years (including at least 15 years within the EU). Moreover, the intended use does not require medical supervision.

In its assessment, the HMPC also considered 3 studies involving patients with acute bronchitis (inflammation of the airways in the lungs), where pelargonium root was compared with placebo (a dummy treatment). Although a possible effect in improving symptoms of bronchitis such as cough was observed, firm conclusions could not be drawn as there were weaknesses in the design and outcome of the studies. Therefore, the HMPC conclusions on the use of these pelargonium root medicines are based on their long-standing use. For detailed information on the studies assessed by the HMPC, see the HMPC assessment report.

WHAT ARE THE RISKS ASSOCIATED WITH PELARGONIUM ROOT MEDICINES?

Very rare side effects (seen in less than 1 patient in 10,000) have been reported with pelargonium root medicines. These include mild gut complaints such as diarrhoea, discomfort around the stomach area, nausea or vomiting, difficulty swallowing, mild nasal and gum bleeding and allergic reactions. Liver problems have also been reported but the frequency is not known.

HOW ARE PELARGONIUM ROOT MEDICINES APPROVED IN THE EU?

Any applications for the licensing of medicines containing pelargonium root have to be submitted to the national authorities responsible for medicinal products, which will assess the application for the herbal medicine and take into account the scientific conclusions of the HMPC. Information on the use and licensing of pelargonium root medicines in EU Member States should be obtained from the relevant national authorities.
Measuring and optimising umckalin concentration in wild-harvested and cultivated Pelargonium sidoides (Geraniaceae)

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Pelargonium sidoides; umckalin; Coumarins; Chemical composition; Understanding of the plant

Abstract

A historical, scientific and commercial perspective on the medicinal use of Pelargonium sidoides (Geraniaceae)

1. Introduction

Many South African medicinal plants, including Pelargonium sidoides, Pelargonium quenstedtiae and Pelargonium aethiopicum, are recognised internationally as herbal medicines. Pelargonium sidoides, the species most extensively used in the production of internationally marketed herbal syrups, is the subject of much international research and development. Pelargonium sidoides, a novel herb, has recently become available commercially as Umckaloabo® (Stevens' Cure), to be used for the treatment of dysentery (e.g. Salmonella typhi). Pelargonium sidoides is a traditional herbal medicine in South Africa and the AAFCP (African Association for the Advancement of Coumarins) has recommended its use for the treatment of various ailments (Von Will et al., 2003). Accordingly, the wild stocks of these plants are susceptible to over-exploitation. This issue is particularly prevalent amongst the Xhosa people of the Eastern Cape. Harvest is not extensive for the success in product development.

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3.2.2. Phenolic compounds

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4.2. Correlation of umckalin concentration with soil pH

4.3. Determination of umckalin concentration in harvested plants

4.4. Uptake of umckalin in cultivated plants

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5.1. Influence of cultivation on umckalin concentrations

5.2. Influence of harvesting methods on umckalin concentrations

5.3. Implications for plant production

6. Conclusion

7. Acknowledgements

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Appendix B: Results

Appendix C: Discussion

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